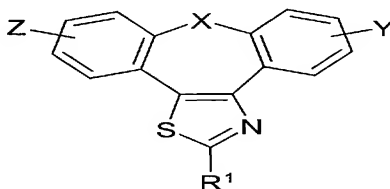


AMENDMENTS TO THE CLAIMS

1. (Currently amended) ~~Use of the compounds of the general A method of treating a disease, damage or disorder of the central nervous system associated with a disorder of neurochemical equilibrium of a biogenic amine or other neurotransmitter, comprising administering to a subject in need thereof a compound of formula I~~



wherein

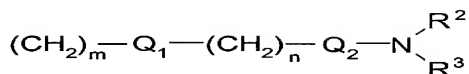
~~X means is selected from the group consisting of CH<sub>2</sub>, or a heteroatom selected from the group consisting of O, S, S(=O), S(=O)<sub>2</sub> and NR<sup>a</sup>, wherein R<sup>a</sup> is selected from the group consisting of hydrogen, or a substituent selected from the group consisting of C<sub>1</sub>-C<sub>3</sub>-alkyl, C<sub>1</sub>-C<sub>3</sub>-alkanoyl, C<sub>1</sub>-C<sub>7</sub>-alkoxycarbonyl, C<sub>7</sub>-C<sub>10</sub>-arylmethoxycarbonyl, C<sub>7</sub>-C<sub>10</sub>-aroyl, C<sub>7</sub>-C<sub>10</sub>-arylalkyl, C<sub>3</sub>-C<sub>7</sub>-alkylsilyl and C<sub>5</sub>-C<sub>10</sub>-alkylsilylalkoxyalkyl;~~

~~Y and Z are each independently from each other mean one or more identical or different substituents linked to any available carbon atom selected from the group consisting of hydrogen, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>2</sub>-C<sub>4</sub>-alkenyl, C<sub>2</sub>-C<sub>4</sub>-alkenylalkynyl, halo-C<sub>1</sub>-C<sub>4</sub>-alkyl, hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkoxy, trifluoromethoxy, C<sub>1</sub>-C<sub>4</sub>-alkanoyl, amino, amino-C<sub>1</sub>-C<sub>4</sub>-alkyl, N-(C<sub>1</sub>-C<sub>4</sub>-alkyl)amino, N,N-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)amino, thiol, C<sub>1</sub>-C<sub>4</sub>-alkylthio, sulfonyl, C<sub>1</sub>-C<sub>4</sub>-alkylsulfonyl, sulfinyl, C<sub>1</sub>-C<sub>4</sub>-alkylsulfinyl, carboxy, C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl, cyano and nitro;~~

~~R<sup>1</sup> means is selected from the group consisting of hydrogen, halogen, C<sub>1</sub>-C<sub>7</sub>-alkyl optionally substituted with one, two, three or more substituents selected from the group consisting of halogen atom, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, N-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, N,N-~~

di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl and C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl; C<sub>2</sub>-C<sub>7</sub>-alkenyl optionally substituted with one, two, three or more halogen atoms; C<sub>2</sub>-C<sub>7</sub>-alkinylalkynyl; monocyclic or bicyclic aryl group having from 6 to 10 carbon atoms and altering double bond and said group can be optionally substituted with one or two substituents selected from the group consisting of fluoro, chloro, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, *N*-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, *N,N*-di(C<sub>1</sub>-C<sub>4</sub> alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl and can be linked to the rest of the molecule by any available carbon atom via direct bond or via C<sub>1</sub>-C<sub>4</sub> alkylene group; monocyclic or bicyclic heteroaryl having the meaning of aromatic and partially aromatic groups of a monocyclic or bicyclic ring with 4 to 12 carbon atoms and at least one of them being heteroatom selected from the group consisting of O, S and N wherein available carbon or nitrogen represent the binding site of the group to the rest of the molecule either via direct bond or via C<sub>1</sub>-C<sub>4</sub> alkylene group and where said heteroaryl can be optionally substituted with fluoro, chloro, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, *N*-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, *N,N*-di(C<sub>1</sub>-C<sub>4</sub> alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl; five member or six member fully saturated or partly unsaturated heterocycle group containing at least one hetero atom selected from the group consisting of O, S and N wherein available carbon or nitrogen represent the binding site of the group to the rest of the molecule either via direct bond or via C<sub>1</sub>-C<sub>4</sub> alkylene group and where said heterocycle can be optionally substituted with fluoro, chloro, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, *N*-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, *N,N*-di(C<sub>1</sub>-C<sub>4</sub> alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl; hydroxy; hydroxy-C<sub>2</sub>-C<sub>7</sub>-alkenyl; hydroxy-C<sub>2</sub>-C<sub>7</sub>-alkinylalkynyl; C<sub>1</sub>-C<sub>7</sub>-alkoxy; thiol; thio-C<sub>2</sub>-C<sub>7</sub>-alkenyl; thio-C<sub>2</sub>-C<sub>7</sub>-alkinylalkynyl; C<sub>1</sub>-C<sub>7</sub>-alkylthio; amino-C<sub>2</sub>-C<sub>7</sub>-alkenyl; amino-C<sub>2</sub>-C<sub>7</sub>-alkinylalkynyl; amino-C<sub>1</sub>-C<sub>7</sub>-alkoxy; C<sub>1</sub>-C<sub>7</sub>-alkanoyl; C<sub>7</sub>-C<sub>10</sub>-aroyl; oxo-C<sub>1</sub>-C<sub>7</sub>-alkyl; C<sub>1</sub>-C<sub>7</sub>-alkanoyloxy; carboxy; an C<sub>1</sub>-C<sub>7</sub>-alkyloxycarbonyl; C<sub>1</sub>-C<sub>7</sub> or aryloxycarbonyl; carbamoyl; *N*-(C<sub>1</sub>-C<sub>7</sub>-alkyl)carbamoyl; *N,N*-di(C<sub>1</sub>-C<sub>7</sub>-alkyl)carbamoyl; cyano; cyano-C<sub>1</sub>-C<sub>7</sub>-alkyl; sulfonyl; C<sub>1</sub>-C<sub>7</sub>-alkylsulfonyl; sulfinyl; C<sub>1</sub>-C<sub>7</sub>-alkylsulfinyl; nitro;

or a substituent of the formula II:



## II

wherein

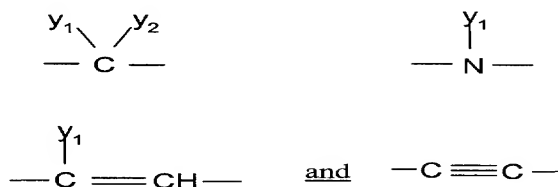
~~R<sup>2</sup> and R<sup>3</sup> simultaneously or are each~~ independently from each other have the meaning of selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, and aryl having the meaning of an aromatic ring as well as fused aromatic rings containing one ring with at least 6 carbon atoms or two rings with totally 10 carbon atoms and with alternating double bonds between carbon atoms; or

R<sup>2</sup> and R<sup>3</sup> taken together with [[N]] the nitrogen atom to which they are attached form a have the meaning of heterocycle or heteroaryl group wherein heterocycle relates to five membered or six membered fully saturated or partly unsaturated heterocycle group containing at least one hetero atom selected from the group consisting of O, S and N and where said heterocycle can be optionally substituted with one or two substituents which are selected from the group consisting of halogen, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, *N*-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, *N,N*-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl, and C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl; and wherein heteroaryl relates to aromatic and partially aromatic groups of a monocyclic or bicyclic ring with 4 to 12 carbon atoms and at least one of them being heteroatom selected from the group consisting of O, S and N and where said heteroaryl can be optionally substituted with one or two substituents which are selected from halogen, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, *N*-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, *N,N*-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl;

~~m has the meaning of is~~ an integer from 1 to 3;

~~n has the meaning of is~~ an integer from 0 to 3;

~~Q<sub>1</sub> and Q<sub>2</sub> are each~~ independently selected from the group consisting of ~~from~~ each other have the meaning of oxygen, sulfur, or a group;



wherein substituents

~~y<sub>1</sub> and y<sub>2</sub> are each independently from each other have the meaning of selected from the group consisting of hydrogen, halogen, optionally-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl optionally substituted with one or more substituents selected from the group consisting of halogen, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, N-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, N,N-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl and C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl; or aryl optionally substituted with one or two substituents selected from the group consisting of halogen, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, N-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, N,N-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl, and C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl; wherein an optionally-substituted-alkyl or aryl have the meaning as defined above; hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-alkanoyl, thiol, C<sub>1</sub>-C<sub>4</sub>-alkylthio, sulfonyl, C<sub>1</sub>-C<sub>4</sub>-alkylsulfonyl, sulfinyl, C<sub>1</sub>-C<sub>4</sub>-alkylsulfinyl, cyano, and nitro, or~~

~~y<sub>1</sub> and y<sub>2</sub> taken together with the carbon atom to which they are attached form a carbonyl group or an imino group;~~

~~a monocyclic or bicyclic aryl group; a monocyclic or bicyclic heteroaryl group; and a heterocycle, wherein the monocyclic or bicyclic aryl group, the monocyclic or bicyclic heteroaryl group and the heterocycle are linked to the thiophene ring via a direct bond or a C<sub>1</sub>-C<sub>4</sub> alkylene group, and are each optionally substituted with one or more substituents selected from the group consisting of fluoro, chloro, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, N-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, N,N-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl and C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl;~~

~~and of their a pharmaceutically acceptable salt or solvate thereof salts and solvates for the manufacture of pharmaceutical formulations for the treatment and prevention of diseases;~~

~~damages and disorders of the central nervous system caused by disorders of neurochemical equilibrium of biogenic amines or other neurotransmitters.~~

2. (Currently amended) ~~Use according to The method of~~ claim 1, wherein the ~~selected biogenic amines are~~ amine is serotonin, norepinephrine and or dopamine.

3. (Currently amended) ~~Use according to The method of~~ claim 1, wherein ~~the~~ neurotransmitter is glutamate.

4. (Currently amended) ~~Use according to claims 1, 2 or 3~~ The method of claim 1 wherein the ~~compounds~~ compound of the general formula I ~~aet upon the neurochemical equilibrium by regulating~~ regulates the synthesis, ~~storage, release, metabolism, storing, releasing, metabolizing and/or reabsorption or receptor binding of a~~ biogenic amine amines or neurotransmitter ~~neurotransmitters and binding to their receptors.~~

5. (Currently amended) ~~Use according to The method of~~ claim 4, wherein the ~~compounds~~ compound of the general formula I ~~show binding affinity~~ binds to a receptor of ~~one or more a~~ biogenic amines amine.

6. (Currently amended) ~~Use according to The method of~~ claim 5, wherein the ~~compounds~~ compound of the general formula I ~~show a significant binding affinity~~ binds to a serotonin 5-HT<sub>2A</sub> and or 5-HT<sub>2C</sub> ~~receptors~~ receptor.

7. (Currently amended) ~~Use according to The method of~~ claim 6, wherein the ~~compounds~~ compound of the general formula I ~~show binding affinity to selected~~ binds to a serotonin 5-HT<sub>2A</sub> or 5-HT<sub>2C</sub> receptors receptor with an in a concentration of IC<sub>50</sub><1µM of less than 1µM.

8. (Currently amended) ~~Use according to The method of~~ claim 1, wherein the ~~compounds~~ compound of the general formula I ~~aet as~~ binds to a  $\sigma$ 1 receptor ~~ligands in a concentration of with an IC<sub>50</sub><1µM of less than 1 µM by modulating central neurotransmitter system.~~

9. (Currently amended) ~~Use according to claims 1, 6 or 8~~ The method of claim 1, wherein the ~~c-compounds~~ compound of the general formula I ~~show dual-binding affinity binds to a~~  $\sigma_1$  receptor and to at least one serotonin receptor selected from 5-HT<sub>2A</sub> and 5-HT<sub>2C</sub>.

10. (Currently amended) ~~Use according to~~ The method of claim 1, wherein the ~~diseases and disorders~~ disease or disorder of the central nervous system ~~are~~ is selected from the group consisting of anxiety, depression ~~and modest depression~~, bipolar disorders, sleeping disorders, sexual disorders, psychosis, borderline psychosis, schizophrenia, migraine, personality disorders, ~~and~~ obsessive-compulsive disorders, social phobia, ~~or~~ panic attacks, organic mental disorders in children, aggression, memory disorders, ~~and~~ personality disorders in elderly people, addiction, obesity, bulimia and ~~similar~~ other eating disorders, snoring, ~~and~~ premenstrual troubles.

11. (Currently amended) ~~Use according to~~ The method of claim 1, wherein the ~~damages of damage to~~ the central nervous system ~~are~~ is caused by trauma, brain stroke, neurodegenerative diseases, cardiovascular disorders ~~such as high blood pressure~~, thrombosis, infarct ~~as well as by~~ or gastrointestinal disorders.

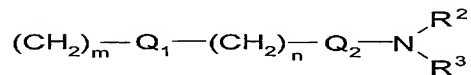
12. (Currently amended) ~~Use according to~~ The method of claim 1 wherein X ~~represents~~ is O, S, or NR<sup>a</sup>, wherein R<sup>a</sup> is hydrogen, ~~or substituent selected from the group consisting of~~ C<sub>1</sub>-C<sub>3</sub>-alkyl, C<sub>1</sub>-C<sub>3</sub>-alkanoyl, C<sub>7</sub>-C<sub>10</sub>-aroyl ~~and~~ or C<sub>7</sub>-C<sub>10</sub>-arylalkyl.

13. (Currently amended) ~~Use according to claims 1 or 12~~ wherein Y and Z ~~are each~~ are each independently ~~from each other mean one or more identical or different substituents linked to any available carbon atom~~ selected from the group consisting of hydrogen, fluorine, chlorine, bromine, C<sub>1</sub>-C<sub>4</sub>-alkyl, halo-C<sub>1</sub>-C<sub>4</sub>-alkyl, hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkoxy, trifluoromethoxy, C<sub>1</sub>-C<sub>4</sub>-alkanoyl, amino, amino-C<sub>1</sub>-C<sub>4</sub>-alkyl, N-(C<sub>1</sub>-C<sub>4</sub>-alkyl)amino, N,N-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)amino, thiol, C<sub>1</sub>-C<sub>4</sub>-alkylthio, cyano and nitro.

14. (Currently amended) ~~Use according to claims 1, 12 or 13~~ The method of claim 1, wherein R<sup>1</sup> ~~has the maning of~~ is selected from the group consisting of hydrogen, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl optionally substituted with one, ~~two, three~~ or more substituents selected from the group

consisting of halogen atom, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, *N*-(C<sub>1</sub>-C<sub>4</sub>) alkylamino and *N,N*-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino; monocyclic or bicyclic aryl group having from 6 to 10 carbon atoms and altering double bond and said group can be optionally substituted with one or two substituents selected from the group consisting of fluoro, chloro, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, *N*-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, *N,N*-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl and can be linked to the rest of the molecule by any available carbon atom via direct bond or via C<sub>1</sub>-C<sub>4</sub> alkylene group; monocyclic or bicyclic heteroaryl having the meaning of aromatic and partially aromatic groups of a monocyclic or bicyclic ring with 4 to 12 carbon atoms and at least one of them being heteroatom selected from the group consisting of O, S and N wherein available carbon or nitrogen represent the binding site of the group to the rest of the molecule either via direct bond or via C<sub>1</sub>-C<sub>4</sub> alkylene group and where said heteroaryl can be optionally substituted with fluoro, chloro, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, *N*-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, *N,N*-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl; five member or six member fully saturated or partly unsaturated heterocycle group containing at least one hetero atom selected from the group consisting of O, S and N wherein available carbon or nitrogen represent the binding site of the group to the rest of the molecule either via direct bond or via C<sub>1</sub>-C<sub>4</sub> alkylene group and where said heterocycle can be optionally substituted with fluoro, chloro, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, *N*-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, *N,N*-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl; hydroxyl; C<sub>1</sub>-C<sub>4</sub> alkoxy; thiol; C<sub>1</sub>-C<sub>4</sub> alkylthio; C<sub>1</sub>-C<sub>3</sub> alkanoyl; C<sub>7</sub>-C<sub>10</sub>-aroyl; C<sub>1</sub>-C<sub>7</sub> alkanoyloxy, C<sub>1</sub>-C<sub>7</sub> alkyloxycarbonyl; C<sub>7</sub>-C<sub>10</sub>-aryloxycarbonyl, carbamoyl, *N*-(C<sub>1</sub>-C<sub>7</sub>-alkyl)carbamoyl, *N,N*-di(C<sub>1</sub>-C<sub>7</sub>-alkyl)carbamoyl, cyano, cyano-C<sub>1</sub>-C<sub>7</sub> alkyl, nitro;

or a substituent represented with of the formula II:



II

wherein

~~R<sup>2</sup> and R<sup>3</sup> simultaneously or are each~~ independently from each other have the meaning of hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, or aryl; ~~wherein aryl has the meaning as defined above or~~  
R<sup>2</sup> and R<sup>3</sup> taken together with [[N]] with the nitrogen atom to which they are attached form a have the meaning of heterocycle or heteroaryl group selected from the group consisting of morpholine-4-yl, piperidine-1-yl, pyrrolidine-1-yl, imidazole-1-yl and piperazine-1-yl;

~~m has the meaning of is~~ an integer from 1 to 3;

~~n has the meaning of is~~ an integer from 0 to 3; and

~~Q<sub>1</sub> and Q<sub>2</sub> are each~~ independently from each other have the meaning of oxygen or CH<sub>2</sub> group

a monocyclic or bicyclic aryl group; a monocyclic or bicyclic heteroaryl group; and a heterocycle, wherein the monocyclic or bicyclic aryl group, the monocyclic or bicyclic heteroaryl group and the heterocycle are linked to the thiophene ring via a direct bond or a C<sub>1</sub>-C<sub>4</sub> alkylene group, and are each optionally substituted with one or more substituents selected from the group consisting of fluoro, chloro, C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, thiol, C<sub>1</sub>-C<sub>4</sub> alkylthio, amino, N-(C<sub>1</sub>-C<sub>4</sub>) alkylamino, N,N-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, sulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, sulfinyl and C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl.

15. (Currently amended) ~~Use according to The method of~~ claim 1, wherein the ~~compounds compound~~ of the general formula I, ~~pharmaceutically acceptable salts and solvates thereof are~~ is selected from the group consisting of:

- 8-oxa-1-thia-3-aza-dibenzo[e,h]azulene;
- 5-fluoro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulene;
- 5-chloro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulene;
- 1,8-dithia-3-aza-dibenzo[e,h]azulene;
- 5-chloro-2-methyl-8-oxa-1-thia-3-aza-dibenzo[e,h]azulene;
- 5-fluoro-2-methyl-8-oxa-1-thia-3-aza-dibenzo[e,h]azulene;
- 6-chloro-2-methyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;



2-methyl-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
6-bromo-2-methyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
5-bromo-2-methyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
5-chloro-2-methyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-methyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-methyl-8-oxa-1-thia-3-aza-dibenzo[e,h]azulene;  
(6-chloro-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-yl)-acetonitrile;  
8-oxa-1-thia-3-aza-dibenzo[e,h]azulene-2-carbaldehyde;  
5-fluoro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulene-2-carbaldehyde;  
5-chloro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulene-2-carbaldehyde;  
1,8-dithia-3-aza-dibenzo[e,h]azulene-2-carbaldehyde;  
6-chloro-2-vinyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
(6-chloro-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-yl)-acetic acid ethyl ester;  
6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene-2-carboxylic acid ethyl ester;  
5-fluoro-1,8-dithia-3-aza-dibenzo[e,h]azulene-2-carboxylic acid ethyl ester;  
5-fluoro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-yl-acetic acid methyl ester;  
5-chloro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-yl-acetic acid methyl ester;  
2-phenyl-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(4-chloro-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-pyridin-3-yl-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-pyridin-4-yl-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-thiophen-3-yl-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(3-pyrrol-1-yl-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(3-chloro-4-fluoro-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(4-tert-butyl-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-pyrazin-2-yl-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
6-trifluoromethyl-2-(4-trifluoromethyl-phenyl)-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(4-[1,3]dioxolan-2-yl-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-  
dibenzo[e,h]azulene;

(6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-yl)-(3,4,5-trimethoxy-phenyl)amine;  
(3-methoxy-phenyl)-(6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-yl)-amine;  
2-(3,5-dibromo-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(3-fluoro-4-methyl-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(2,3-dihydro-benzofuran-5-yl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-p-toluy1-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(4-[1,2,3]thiadiazol-4-yl-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-isoxazol-5-yl-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(2-methyl-thiazol-4-yl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(6-methyl-pyridin-3-yl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(6-methoxy-pyridin-3-yl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(3-chloro-5-trifluoromethyl-pyridin-2-yl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(2,6-dichloro-benzyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
6-trifluoromethyl-2-(4-trifluoromethyl-pyridin-3-yl)-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(2,6-dichloro-4-trifluoromethyl-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(2,4-dichloro-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
6-trifluoromethyl-2-(3-trifluoromethyl-phenyl)-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(5-methyl-isoxazol-3-yl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(2-chloro-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(2,6-dichloro-pyridin-4-yl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;

6-trifluoromethyl-2-(6-trifluoromethyl-pyridin-2-yl)-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-(2,4-difluoro-phenyl)-6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-pyridin-4-yl-6-trifluoromethyl-8-oxa-1-thia-3-aza-dibenzo[e,h]azulene;  
5,6-dichloro-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
2-pyridin-4-yl-8H-1-thia-3-aza-dibenzo[e,h]azulene;  
5-methoxy-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
5-fluoro-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
7-chloro-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
7-bromo-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
6-chloro-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
5-bromo-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
7-chloro-5-fluoro-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
5-methyl-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
7-methyl-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
5-chloro-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
6-methyl-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
6-chloro-5-fluoro-2-pyridin-4-yl-1,8-dithia-3-aza-dibenzo[e,h]azulene;  
1-(2-pyridin-4-yl-1-thia-3,8-diaza-dibenzo[e,h]azulen-8-yl)-ethanone;  
(8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-yl)-methanol;  
(5-fluoro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-yl)-methanol;  
(5-chloro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-yl)-methanol;  
(1,8-dithia-3-aza-dibenzo[e,h]azulen-2-yl)-methanol;  
2-(6-chloro-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-yl)-ethanol;  
(6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-yl)-methanol;  
(5-fluoro-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-yl)-methanol;  
dimethyl-[2-(8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-ethyl]-amine;  
dimethyl-[3-(8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-propyl]-amine;  
3-(8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-propyl]-amine;

[2-(5-fluoro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-ethyl]-  
dimethylamine;  
[3-(5-fluoro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-propyl]-  
dimethylamine;  
[2-(5-chloro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-ethyl]-  
dimethylamine;  
[3-(5-chloro-8-oxa-1-thia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-propyl]-  
dimethylamine;  
[2-(1,8-dithia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-ethyl]-dimethylamine;  
[3-(1,8-dithia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-propyl]-dimethylamine;  
{3-[2-(6-chloro-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-yl)-ethoxy]-propyl}-  
dimethylamine;  
dimethyl-[2-(6-trifluoromethyl-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-  
ethyl]-amine;  
[2-(5-fluoro-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-propyl]-  
dimethylamine;  
dimethyl-[2-(5-fluoro-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-ethyl]-  
dimethylamine; and  
[3-(5-fluoro-1,8-dithia-3-aza-dibenzo[e,h]azulen-2-ylmethoxy)-propyl]-  
dimethylamine; and  
a pharmaceutically acceptable salt or solvate thereof.